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EXAMINER

KRUEER, KEVIN R

ART UNIT PAPER NUMBER

1773

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Please find below and/or attached an Office communication concerning this application or proceeding.



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**MAILED**  
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**GROUP 1700**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 03042004

Application Number: 09/966,351  
Filing Date: September 28, 2001  
Appellant(s): MERCX ET AL.

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Marina Larson  
For Appellants

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed November 17, 2003.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellants' statement of the status of amendments after final rejection contained in the brief is incorrect.

The amendment after final rejection filed on July 14, 2003 has been entered.  
The amendment canceled claim 12.

Appellants state that an amendment after appeal was filed concurrently with the Appeal Brief. However, the Office has no record of such an amendment. The Examiner contacted Appellants on March 5, 2004 to verify that no amendment was filed concurrently with the Appeal Brief. Appellants concurred that no amendment had been filed concurrently with the Appeal Brief.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) Issues**

The appellants' statement of the issues in the brief is correct.

**(7) Grouping of Claims**

Appellants' brief includes a statement that claims 1 and 3-11 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) Claims Appealed**

A substantially correct copy of appealed claims 1 and 3-11 appears on pages 10 and 11 of the Appendix to the appellants' brief. The minor errors are as follows:

The word "preferably" has been excluded from claim 6. Claim 6 should state:

-- 6. A metallized molded resin article according to claim 1 wherein the release agent/lubricant is **preferably** present in an amount of from 0.3 to 2 percent by weight based on the total weight based on the total weight of the resin component of the article.--

**(9) Prior Art of Record**

4,623,562	BREITENFELLNER et al.	11-1986
4,185,047	COHEN	01-1980
4,699,942	WEAVER	10-1987
4,283,314	ZEILSTRA et al.	08-1981

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1- 11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Breitenfellner et al. (US 4,623,562) in view of Cohen (US 4,185,047). Breitenfellner teaches a light reflecting body of which the wall consists of a polyalkylene terephthalate and or copolymers thereof, and a light reflecting metal layer applied directly to at least one surface of the wall (col 1, lines 26+). The shaping of the light reflecting body is preferably performed by an injection molding process (col 3, lines 54+). After shaping, the surface to be reflecting of the light reflecting body is provided, in a manner known per se, with a metal layer, preferably by vapor deposition of aluminum (col 3, lines 60-63). The molded light reflecting body may be in the form of convex, concave or plane mirrors, for example for producing headlight reflectors, reflectors for rear lamps, reflector for traffic lights or indicator lamps (col 3, lines 64-68).

Breitenfellner does not teach that the polyester base should comprise the claimed composition. However, Cohen teaches a thermoplastic molding composition having improved mold release properties. The composition comprises (a) a thermoplastic resin selected from the group consisting of high molecular weight linear

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polyester and high molecular weight block polyester, (b) from about 0.1-4.5wt% of a polyolefin or olefin-based copolymer, and, (c) optionally, from about 0.02-0.5wt% of talc (abstract). The examiner takes the position that the talc reads on appellants' claimed "nucleating agent" since Appellants state that talc is "the most preferred nucleating agent (page 4, line 17 of specification)." Alternatively, Cohen further teaches that nucleating agents such as graphite or metal oxide may be included in the composition (col 4, lines 55+). The polyester resin may comprise polyethylene terephthalate or poly(1,4-butylene terephthalate) (col 2, lines 49+). The polyolefin or olefin-based copolymer is preferably included in amounts of 0.5-2wt% and is selected from the group comprising polyethylene, EVA, and ethylene acrylic acid (col 3, lines 63+). The composition has improved mold release and good surface appearance (col 1, lines 40+). Thus, it would have been obvious to one of ordinary skill in the art to utilize the mold composition taught in Cohen as the base layer of the metallized light reflecting laminate taught in Breitenfellner because said compositions have improved mold release properties.

The examiner takes the position that the polyolefin component taught in Cohen inherently meets the limitations of claim 2 because the component taught in Cohen is the same polymer as the polymeric release agent/lubricant component disclosed/claimed by Appellants. Furthermore, the examiner takes the position that the composition taught in Cohen meets the limitations of claim 5 because said composition is taught to have good mold release.

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2. Claims 1- 11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Breitenfellner et al. (US 4,623,562) in view of Weaver et al. (US 4,699,942).

Breitenfellner teaches a light reflecting body of which the wall consists of a polyalkylene terephthalate and or copolymers thereof, and a light reflecting metal layer applied directly to at least one surface of the wall (col 1, lines 26+). The shaping of the light reflecting body is performed by customary processes, preferably by injection molding process (col 3, lines 54+). After shaping, the surface to be reflecting of the light reflecting body is provided, in a manner known per se, with a metal layer, preferably by vapor deposition of aluminum (col 3, lines 60-63). The molded light reflecting body may be in the form of convex, concave or plane mirrors, for example for producing headlight reflectors, reflectors for rear lamps, reflector for traffic lights or indicator lamps (col 3, lines 64-68).

Breitenfellner does not teach that the polyester base should comprise the claimed composition. However, Weaver teaches a molding composition comprising a crystalline polyester, 0.25-0.75wt% a low molecular weight polyethylene mold release, 0.25-0.75wt% talc as a nucleating agent, and up to 2.45wt% of various other additives (col 2, lines 29+). The polyester is generally derived from terephthalic acid and glycols having 2-8 carbons (col 3, lines 4+). Such compositions result in superior polyester (col 2, lines 21+) and allow better stampability. Therefore, it would have been obvious to one of ordinary skill in the art to utilize the mold composition taught in Weaver as the base layer of the metallized light reflecting laminate taught in Breitenfellner because said compositions have improved properties and stampability.

The examiner takes the position that the polyolefin component taught in Weaver inherently meets the limitations of claim 2 because the component taught in Weaver is the same polymer as the polymeric release agent/lubricant component disclosed/claimed by Appellants. Furthermore, the examiner takes the position that the composition taught in Weaver meets the limitations of claim 5 because said composition is taught to have good mold release.

**(11) Response to Argument**

The rejection of claims 1-7 and 9-11 under 35 U.S.C. 103(a) as being unpatentable over JP 2000035509A (herein referred as Polyplastics) in view of Cohen et al. (US 4,185,047) has been overcome.

The rejection of claims 1-7 and 9-11 under 35 U.S.C. 103(a) as being unpatentable over JP 2000035509A (herein referred as Polyplastics) in view of Weaver et al. (US 4,699,942) has been overcome.

The rejection of claims 1-11 under 35 U.S.C. 112, second paragraph, as being indefinite for containing the term "non-blooming" has been overcome.

With respect to Breitenfellner in view of Cohen, Appellants disagree with the examiner motivation for combining the teachings of said references. Specifically, the examiner took the position that it would have been obvious to one of ordinary skill in the art to utilize the composition taught in Cohen in the laminate taught by Breitenfellner because said composition has "improved mold release properties and surface appearance." Appellants argue that Cohen does not indicate any change in surface



properties, stating only that the compositions have "good surface properties." After reviewing the teachings of Cohen, the examiner agrees with Appellants' conclusion. However, the examiner maintains the position that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use of the composition taught in Cohen in the laminate taught in Breitenfellner because Cohen's composition has improved mold release properties. Appellants concede that Cohen teaches a composition with improved mold release properties (see page 6 of the Appeal Brief, second to last paragraph).

Appellants further argue that the claims are allowable over Breitenfellner in view of Cohen because "the claimed invention has an unexpected property." Specifically, Appellants argue that the examples disclosed in the specification show that the claimed articles do not suffer from the defect of blooming. The examiner has fully considered the examples in the specification, but does not consider the results to be unexpected. The examiner initially points out that "blooming" is a property of the resin composition, not the laminate. Thus, the examiner maintains the position that the composition of Cohen necessarily exhibits "non-blooming" since it comprises the claimed components in the claimed relative amounts. Furthermore, one of ordinary skill in the art would expect a higher molecular weight release agent/lubricant to exhibit less blooming than the low molecular weight release agent/lubricant utilized in the comparative examples because low molecular weight components are known to migrate toward the surface of a molded product.

In support of this statement, the examiner pointed to the disclosure of US 4,283,314 that states, "...because of (the lubricant's) high molecular weight they have a relatively low volatility and little tendency to migrate so that the lubricant will less readily exude from the polymer phase (col 4, lines 38+)." Appellants argue that the examiner has merely plucked a patent from the body of art without consideration of whether it is connected in any way to the claimed invention. The examiner respectfully disagrees. The disclosure of US 4,283,314 on which the examiner relies is drawn to the general interaction between a polymer matrix and a lubricant. While Appellants argue that the teachings of US 4,283,314 are drawn solely to polyvinyl chloride compositions, Appellants have not provided any argument as to why the teachings of the reference should be considered to be limited to PVC compositions or why the interaction between a PVC matrix and a lubricant would be different than the interaction between other polymer matrix and a lubricant. The examiner notes that Appellants have the burden of showing that the differences in results are in fact unexpected and unobvious. Appellants have not established that the results are unexpected. Furthermore, Appellants have also not compared their invention to the closest prior art-the composition of Cohen.

With respect to Breitenfellner in view of Weaver, Appellants argue that the examiner has failed to establish motivation for the rejection. Specifically, Appellants argue that the examiner has failed to show that improved properties and stampability are desirable in the laminate taught by Breitenfellner. The examiner respectfully disagrees. "Stampability" refers to the compositions ability to be molded (see

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Background of the invention). Since the laminate taught in Breitenfellner is molded, the moldability of the composition is important.


Appellants further argue that the improvements in Weaver stem from a specific combination of nucleating agents, mold release agents, carbon black, and antioxidants. The examiner agrees with Appellants, but notes that the claims do not exclude the presence of such elements. The nucleating agents, carbon black, and antioxidant are included in amounts of less than 3% (see claim 1). Appellants' claims allow for "less than 5% of additional ingredients based on the total weight of the resin composition" to be included in the composition.

For the above reasons, it is believed that the rejections should be sustained.


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Respectfully submitted,


  
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March 18, 2004

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